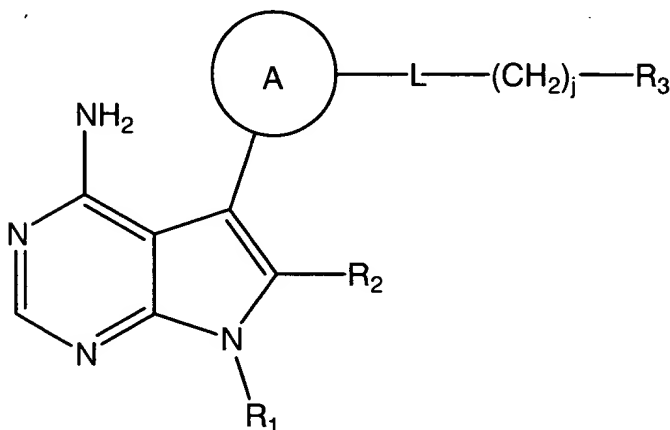


**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A compound represented by the following structural formula:



or pharmaceutically acceptable salts thereof, wherein:

Ring A is a six membered aromatic ring or a five or six membered heteroaromatic ring which is substituted with one or more substituents selected from the group consisting of a substituted or unsubstituted aliphatic group, a halogen, a substituted or unsubstituted aromatic group, substituted or unsubstituted heteroaromatic group, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted aralkyl, substituted or unsubstituted heteroaralkyl, cyano, nitro,  $-\text{NR}_4\text{R}_5$ ,  $-\text{C}(\text{O})_2\text{H}$ , a substituted or unsubstituted alkoxy carbonyl,  $-\text{C}(\text{O})_2$ -haloalkyl, a substituted or unsubstituted alkylthio, a substituted or unsubstituted alkylsulfinyl, a substituted or unsubstituted alkylsulfonyl, a substituted or unsubstituted arylthio, a substituted or unsubstituted arylsulfinyl, a substituted or unsubstituted arylsulfonyl, a substituted or unsubstituted alkyl carbonyl,  $-\text{C}(\text{O})$ -haloalkyl, a substituted or unsubstituted aryloxy, a substituted or unsubstituted carboxamido, substituted or unsubstituted tetrazolyl, trifluoromethylsulphonamido, trifluoromethylcarbonylamino, a substituted or unsubstituted alkynyl, a substituted or unsubstituted alkyl amido or alkylcarboxamido; a substituted or unsubstituted aryl amido or arylcarboxamido, a substituted or unsubstituted styryl,



-S(substituted or unsubstituted heteroaryl) and a substituted or unsubstituted aralkyl amido, aralkylcarboxamido or  $-\text{C}(\text{O})\text{NR}_f\text{R}_g$ ,  $\text{R}_c$  and  $\text{CH}_2\text{OR}_c$ ;

wherein  $\text{R}_f$ ,  $\text{R}_g$  and the nitrogen atom together form a 3-, 4-, 5-, 6- or 7- membered, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted heterobicycloalkyl or a substituted or unsubstituted heteroaromatic; or

$\text{R}_f$  and  $\text{R}_g$  are each, independently, -H, a substituted or unsubstituted aliphatic group or a substituted or unsubstituted aromatic group;

$\text{R}_c$  is hydrogen, or substituted or unsubstituted alkyl or substituted or unsubstituted aryl, - $\text{W}-(\text{CH}_2)_t\text{-O-alkyl}$ , - $\text{W}-(\text{CH}_2)_t\text{-S-alkyl}$ , - $\text{W}-(\text{CH}_2)_t\text{-OH}$ , or  $-\text{W}-(\text{CH}_2)_t\text{-NR}_d\text{R}_e$ ;

$t$  is an integer from 0 to about 6;

$\text{W}$  is a bond or  $-\text{O}-$ ,  $-\text{S}-$ ,  $-\text{S}(\text{O})-$ ,  $-\text{S}(\text{O})_2-$  or  $-\text{NR}_k-$ ;

$\text{R}_k$  is -H or alkyl;

$\text{R}_d$ ,  $\text{R}_e$  and the nitrogen atom to which they are attached together form a 3, 4, 5, 6 or 7-membered substituted or unsubstituted heterocycloalkyl or substituted or unsubstituted heterobicyclic group; or

$\text{R}_d$  and  $\text{R}_e$  are each, independently, -H, alkyl, alkanoyl or  $-\text{K-D}$ ;

wherein  $\text{K}$  is  $-\text{S}(\text{O})_2-$ ,  $-\text{C}(\text{O})-$ ,  $-\text{C}(\text{O})\text{NH}$ ,  $-\text{C}(\text{O})_2-$  or a direct bond and  $\text{D}$  is a substituted or unsubstituted aryl, a substituted or unsubstituted heteroaryl, a substituted or unsubstituted aralkyl, a substituted or unsubstituted heteroaromatic group, a substituted or unsubstituted heteroaralkyl, a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted heterocycloalkyl, a substituted or unsubstituted amino, a substituted or unsubstituted aminoalkyl, a substituted or unsubstituted aminocycloalkyl,  $\text{COOR}_i$ , or substituted or unsubstituted alkyl;

wherein  $\text{R}_i$  is a substituted or unsubstituted aliphatic group or a substituted or unsubstituted aromatic group;

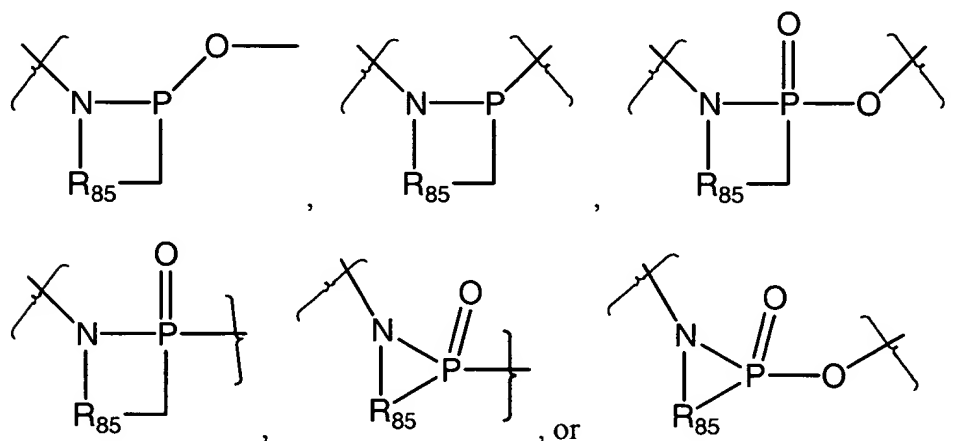
$\text{L}$  is  ~~$-\text{S}-$~~ ;  ~~$-\text{S}(\text{O})-$~~ ;  ~~$-\text{S}(\text{O})_2-$~~ ;  $-\text{N}(\text{C}(\text{O})\text{OR})-$ ;  $-\text{N}(\text{C}(\text{O})\text{R})-$ ;  $-\text{N}(\text{SO}_2\text{R})-$ ;  $-\text{CH}_2\text{O}-$ ;  $-\text{CH}_2\text{S}-$ ;  $-\text{CH}_2\text{N}(\text{R})-$ ;  $-\text{CH}(\text{NR})-$ ;  $-\text{CH}_2\text{N}(\text{C}(\text{O})\text{R})-$ ;  $-\text{CH}_2\text{N}(\text{C}(\text{O})\text{OR})-$ ;  $-\text{CH}_2\text{N}(\text{SO}_2\text{R})-$ ;  $-\text{CH}(\text{NHR})-$ ;  $-\text{CH}(\text{NHC}(\text{O})\text{R})-$ ;  $-\text{CH}(\text{NH}\text{SO}_2\text{R})-$ ;  $-\text{CH}(\text{NHC}(\text{O})\text{OR})-$ ;  $-\text{CH}(\text{OC}(\text{O})\text{R})-$ ;  $-\text{CH}(\text{OC}(\text{O})\text{NHR})-$ ;  $-\text{CH}=\text{CH}-$ ;  $-\text{C}(=\text{NOR})-$ ;  $-\text{C}(\text{O})-$ ;  $-\text{CH}(\text{OR})-$ ;  ~~$-\text{C}(\text{O})\text{N}(\text{R})-$~~ ;  ~~$-\text{N}(\text{R})\text{C}(\text{O})-$~~ ;  $-\text{N}(\text{R})\text{S}(\text{O})-$ ;  $-\text{N}(\text{R})\text{S}(\text{O})_2-$ ;  $-\text{OC}(\text{O})\text{N}(\text{R})-$ ;  ~~$-\text{N}(\text{R})\text{C}(\text{O})\text{N}(\text{R})-$~~ ;  $-\text{NRC}(\text{O})\text{O}-$ ;  $-\text{S}(\text{O})\text{N}(\text{R})-$ ;  ~~$-\text{S}(\text{O})_2\text{N}(\text{R})-$~~ ;  $-\text{N}(\text{C}(\text{O})\text{R})\text{S}(\text{O})-$ ;  $-\text{N}(\text{C}(\text{O})\text{R})\text{S}(\text{O})_2-$ ;  $-\text{N}(\text{R})\text{S}(\text{O})\text{N}(\text{R})-$ ;  $-\text{N}(\text{R})\text{S}(\text{O})_2\text{N}(\text{R})-$ ;  $-\text{C}(\text{O})\text{N}(\text{R})\text{C}(\text{O})-$ ;  $-\text{S}(\text{O})\text{N}(\text{R})\text{C}(\text{O})-$ ;  $-\text{S}(\text{O})_2\text{N}(\text{R})\text{C}(\text{O})-$ ;  $-\text{OS}(\text{O})\text{N}(\text{R})-$ ;  $-\text{OS}(\text{O})_2\text{N}(\text{R})-$ ;  $-\text{N}(\text{R})\text{S}(\text{O})\text{O}-$ ;  $-\text{N}(\text{R})\text{S}(\text{O})_2\text{O}-$ ;  $-\text{N}(\text{R})\text{S}(\text{O})\text{C}(\text{O})-$ ;



-N(R)S(O)<sub>2</sub>C(O)-; -SON(C(O)R)-; -SO<sub>2</sub>N(C(O)R)-; ~~-C(O)O-~~; -N(R)P(OR')O-; -N(R)P(OR')-; -N(R)P(O)(OR')O-; -N(R)P(O)(OR')-; -N(C(O)R)P(OR')O-; -N(C(O)R)P(OR')-; -N(C(O)R)P(O)(OR')O- or -N(C(O)R)P(OR')-, wherein R and R' are each, independently, -H, an acyl group, a substituted or unsubstituted aliphatic group, a substituted or unsubstituted aromatic group, a substituted or unsubstituted heteroaromatic group, or a substituted or unsubstituted cycloalkyl group; or

L is -R<sub>b</sub>N(R)S(O)<sub>2</sub>-, -R<sub>b</sub>N(R)P(O)-, or -R<sub>b</sub>N(R)P(O)O-, wherein R<sub>b</sub> is an alkylene group which when taken together with the sulphonamide, phosphinamide, or phosphonamide group to which it is bound forms a five or six membered ring fused to ring A; or

L is represented by one of the following structural formulas:



wherein R<sub>85</sub> taken together with the phosphinamide, or phosphonamide is a 5-, 6-, or 7 - membered, aromatic, heteroaromatic or heterocycloalkyl ring system;

R<sub>1</sub> is -H, 2-phenyl-1,3-dioxan-5-yl, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>8</sub> cycloalkyl group, a C<sub>5</sub>-C<sub>7</sub> cycloalkenyl group or an optionally substituted phenyl(C<sub>1</sub>-C<sub>6</sub> alkyl) group, wherein the alkyl, cycloalkyl and cycloalkenyl groups are optionally substituted by one or more groups of formula -OR<sup>a</sup>; provided that -OR<sup>a</sup> is not located on the carbon attached to nitrogen;

R<sup>a</sup> is -H or a C<sub>1</sub>-C<sub>6</sub> alkyl group or a C<sub>3</sub>-C<sub>6</sub> cycloalkyl;

R<sub>2</sub> is -H, a substituted or unsubstituted aliphatic group, a substituted or unsubstituted cycloalkyl, a halogen, -OH, cyano, a substituted or unsubstituted aromatic group, a substituted or unsubstituted heteroaromatic group, a substituted or unsubstituted heterocycloalkyl, a substituted or unsubstituted aralkyl, a substituted or unsubstituted heteroaralkyl, -NR<sub>4</sub>R<sub>5</sub>, or -C(O)NR<sub>4</sub>R<sub>5</sub>;



R<sub>3</sub> is a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted aromatic group, a substituted or unsubstituted heteroaromatic group, or a substituted or unsubstituted heterocycloalkyl; or L is -NRSO<sub>2</sub>-, -NRC(O)-, -NRC(O)O-, -S(O)<sub>2</sub>NR-, -C(O)NR- or -OC(O)NR-, and R<sub>3</sub> is substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl or substituted or unsubstituted aralkyl;

provided that j is 0 when L is -CH<sub>2</sub>NR-, -C(O)NR- or -NRC(O)- and R<sub>3</sub> is azacycloalkyl or azaheteroaryl;

R<sub>4</sub>, R<sub>5</sub> and the nitrogen atom together form a 3, 4, 5, 6 or 7-membered, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted heterobicycloalkyl or a substituted or unsubstituted heteroaromatic; or

R<sub>4</sub> and R<sub>5</sub> are each, independently, -H, azabicycloalkyl, a substituted or unsubstituted alkyl group or Y-Z;

Y is selected from the group consisting of -C(O)-, -(CH<sub>2</sub>)<sub>p</sub>-, -S(O)<sub>2</sub>-, -C(O)O-, -SO<sub>2</sub>NH-, -CONH-, (CH<sub>2</sub>)<sub>p</sub>O-, -(CH<sub>2</sub>)<sub>p</sub>NH-, -(CH<sub>2</sub>)<sub>p</sub>S-, -(CH<sub>2</sub>)<sub>p</sub>S(O)-, and -(CH<sub>2</sub>)S(O)<sub>2</sub>-;

p is an integer from 0 to 6;

Z is a substituted or unsubstituted alkyl, substituted or unsubstituted amino, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl or substituted or unsubstituted heterocycloalkyl group; and

j an integer from 0 to 6;

provided that the compound is not

7-tert-butyl-5-[4-(phenylsulphinyl)phenyl]-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;

7-tert-butyl-5-[4-(phenylsulphonyl)phenyl]-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;

N-[4-(4-amino-7-isopropyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-phenyl]benzenesulphonamide;

N-[4-(4-amino-7-isopropyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-phenyl]benzamide;

N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-methoxyphenyl]benzamide;

N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-hydroxyphenyl]benzamide;

N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-methoxyphenyl]benzenesulphonamide;

N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-hydroxyphenyl]benzenesulphonamide;



N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-hydroxyphenyl]-4-tert-butylbenzenesulphonamide;

N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-methoxyphenyl]-4-tert-butylbenzenesulphonamide;

N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-hydroxy-phenyl]-4-chlorobenzamide.

2. (Currently Amended) The compound of claim 1, wherein R<sub>3</sub> is selected from the group consisting of a substituted or unsubstituted phenyl, a substituted or unsubstituted naphthyl, a substituted or unsubstituted pyridyl, a substituted or unsubstituted thienyl, a substituted or unsubstituted benzotriazole, a substituted or unsubstituted tetrahydropyranyl, a substituted or unsubstituted tetrahydrofuranyl, a substituted or unsubstituted dioxane, a substituted or unsubstituted dioxolane, a substituted or unsubstituted quinoline, a substituted or unsubstituted thiazole, substituted or unsubstituted isoxazole, substituted or unsubstituted cyclopentanyl, a substituted or unsubstituted benzofuran, substituted or unsubstituted benzothiophene, substituted or unsubstituted benzisoxazole, substituted or unsubstituted benzisothiazole, substituted or unsubstituted benzothiazole, substituted or unsubstituted benzoxazole, substituted or unsubstituted benzimidazole, substituted or unsubstituted benzoxadiazole, substituted or unsubstituted benzothiadiazole, substituted or unsubstituted isoquinoline, substituted or unsubstituted quinoxaline, substituted or unsubstituted indole and substituted or unsubstituted pyrazole.

3. (Currently Amended) The compound of Claim 2 wherein R<sub>3</sub> is substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, CH<sub>3</sub>, NO<sub>2</sub>, OCF<sub>3</sub>, OCH<sub>3</sub>, CN, CO<sub>2</sub>CH<sub>3</sub>, CF<sub>3</sub>, t-butyl, pyridyl, substituted or unsubstituted oxazolyl, substituted or unsubstituted benzyl, substituted or unsubstituted benzenesulfonyl, substituted or unsubstituted phenoxy, substituted or unsubstituted phenyl, substituted or unsubstituted amino, carboxyl, substituted or unsubstituted tetrazolyl, styryl, -S-(substituted or unsubstituted aryl), -S-(substituted or



unsubstituted heteroaryl), substituted or unsubstituted heteroaryl, substituted or unsubstituted heterocycloalkyl, alkynyl,  $-C(O)NR_fR_g$ ,  $R_c$ , and  $CH_2OR_c$ ;

wherein  $R_f$ ,  $R_g$  and the nitrogen atom together form a 3, 4, 5, 6 or 7-membered, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted heterobicycloalkyl or a substituted or unsubstituted heteroaromatic  $R_f$  and  $R_g$  are each, independently, -H, a substituted or unsubstituted aliphatic group or a substituted or unsubstituted aromatic group; and

$R_c$  is hydrogen, or substituted or unsubstituted alkyl or substituted or unsubstituted aryl,  $-W-(CH_2)_t-NR_dR_e$ ,  $-W-(CH_2)_t-O$ -alkyl,  $-W-(CH_2)_t-S$ -alkyl, or  $-W-(CH_2)_t-OH$ ;

$t$  is an integer from 0 to 6;

$W$  is a bond or  $-O-$ ,  $-S-$ ,  $-S(O)-$ ,  $-S(O)_2-$ , or  $-NR_k-$ ;

$R_k$  is -H or alkyl; and

$R_d$ ,  $R_e$  and the nitrogen atom to which they are attached together form a 3, 4, 5, 6 or 7-membered substituted or unsubstituted heterocycloalkyl or substituted or unsubstituted heterobicyclic group; or

$R_d$  and  $R_e$  are each, independently, -H, alkyl, alkanoyl or  $-K-D$ ;

$K$  is  $-S(O)_2-$ ,  $-C(O)-$ ,  $-C(O)NH-$ ,  $-C(O)_2-$ , or a direct bond;

$D$  is a substituted or unsubstituted aryl, a substituted or unsubstituted heteroaryl, a substituted or unsubstituted aralkyl, a substituted or unsubstituted heteroaromatic group, a substituted or unsubstituted heteroaralkyl, a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted heterocycloalkyl, a substituted or unsubstituted amino, a substituted or unsubstituted aminoalkyl, a substituted or unsubstituted aminocycloalkyl,  $COOR_i$  or substituted or unsubstituted alkyl; and

$R_i$  is a substituted or unsubstituted aliphatic group or a substituted or unsubstituted aromatic group.

4. (Previously Presented) The compound of claim 3, wherein  $R_3$  is a substituted or unsubstituted phenyl, thienyl, benzoxadiazolyl, or benzothiadiazolyl.

5. (Previously Presented) The compound of Claim 1, wherein ring A is selected from the group consisting of a substituted phenyl, a substituted naphthyl, a substituted pyridyl, and a substituted indole.



6. (Currently Amended) The compound of Claim 5 wherein ring A is substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, CH<sub>3</sub>, NO<sub>2</sub>, CN, CO<sub>2</sub>CH<sub>3</sub>, CF<sub>3</sub>, t-butyl, pyridyl, substituted or unsubstituted oxazolyl, substituted or unsubstituted benzyl, substituted or unsubstituted benzenesulfonyl, substituted or unsubstituted phenoxy, substituted or unsubstituted phenyl, NR<sub>4</sub>R<sub>5</sub>, carboxyl, substituted or unsubstituted tetrazolyl, styryl, -S- (substituted or unsubstituted aryl), -S- (substituted or unsubstituted heteroaryl), substituted or unsubstituted heteroaryl, substituted or unsubstituted heterocycloalkyl, alkynyl, -C(O)NR<sub>f</sub>R<sub>g</sub>, R<sub>c</sub> and CH<sub>2</sub>OR<sub>c</sub>;

R<sub>f</sub>, R<sub>g</sub> and the nitrogen atom together form a 3, 4, 5, 6 or 7-membered, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted heterobicycloalkyl or a substituted or unsubstituted heteroaromatic; or

R<sub>f</sub> and R<sub>g</sub> are each, independently, -H, a substituted or unsubstituted aliphatic group or a substituted or unsubstituted aromatic group; and

R<sub>c</sub> is hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted aryl, -W-(CH<sub>2</sub>)<sub>t</sub>-NR<sub>d</sub>R<sub>e</sub>, -W-(CH<sub>2</sub>)<sub>t</sub>-O-alkyl, -W-(CH<sub>2</sub>)<sub>t</sub>-S-alkyl, or -W-(CH<sub>2</sub>)<sub>t</sub>-OH;

t is an integer from 0 to 6;

W is a bond or -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-, or -NR<sub>k</sub>-;

R<sub>k</sub> is -H or alkyl; and

R<sub>d</sub>, R<sub>e</sub> and the nitrogen atom to which they are attached together form a 3, 4, 5, 6 or 7-membered substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted heterobicycloalkyl or a substituted or unsubstituted heteroaromatic; or

R<sub>d</sub> and R<sub>e</sub> are each, independently, -H, alkyl, alkanoyl, or -K-D;

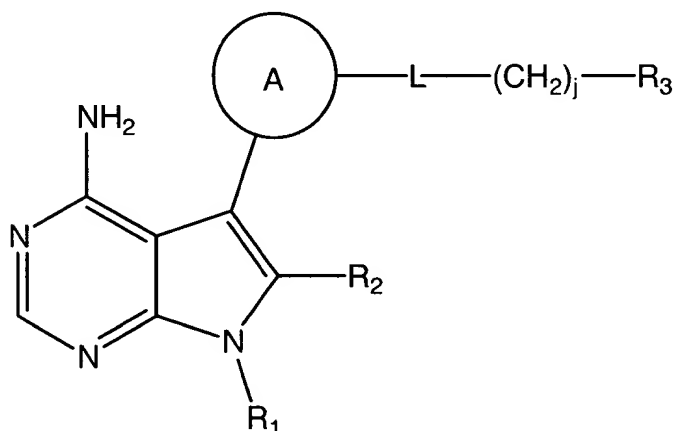
K is -S(O)<sub>2</sub>-, -C(O)-, -C(O)NH-, -C(O)<sub>2</sub>-, or a direct bond;

D is a substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted aralkyl, substituted or unsubstituted heteroaromatic group, substituted or unsubstituted heteroaralkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted amino, substituted or unsubstituted aminoalkyl, substituted or unsubstituted aminocycloalkyl, COOR<sub>i</sub>, or a substituted or unsubstituted alkyl; and

R<sub>i</sub> is a substituted or unsubstituted aliphatic group or a substituted or unsubstituted aromatic group.



7. (Previously Presented) The compound of claim 6, wherein ring A is a substituted phenyl.
8. (Previously Presented) The compound of claim 1, wherein  $R^1$  is a cyclopentyl group, a hydroxycyclopentyl or an isopropyl.
9. (Cancelled)
10. (Original) The compound of claim 1, wherein  $R_2$  is -H.
11. (Previously Presented) A compound represented by the following structural formula



or pharmaceutically acceptable salts thereof, wherein:

Ring A is a six membered aromatic ring or a five or six membered heteroaromatic ring which is substituted with one or more substituents selected from the group consisting of a substituted or unsubstituted aliphatic group, a halogen, a substituted or unsubstituted aromatic group, substituted or unsubstituted heteroaromatic group, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted aralkyl, substituted or unsubstituted heteroaralkyl, cyano, nitro,  $-\text{NR}_4\text{R}_5$ ,  $-\text{C}(\text{O})_2\text{H}$ , a substituted or unsubstituted alkoxy carbonyl,  $-\text{C}(\text{O})_2$ -haloalkyl, a substituted or unsubstituted alkylthio, a substituted or unsubstituted alkylsulfinyl, a substituted or unsubstituted alkylsulfonyl, a substituted or unsubstituted arylthio, a substituted or unsubstituted arylsulfinyl, a substituted or unsubstituted arylsulfonyl, a substituted or unsubstituted alkyl carbonyl,  $-\text{C}(\text{O})$ -haloalkyl, a substituted or unsubstituted aryloxy, a substituted or unsubstituted carboxamido, tetrazolyl, trifluoromethylsulphonamido, trifluoromethylcarbonylamino, a substituted or unsubstituted alkynyl, a substituted or unsubstituted alkyl amido or alkylcarboxamido; a substituted or



unsubstituted aryl amido or arylcarboxamido, a substituted or unsubstituted styryl and a substituted or unsubstituted aralkyl amido or aralkylcarboxamido;  
wherein L is  $-\text{NHSO}_2\text{R}-$ ,  $-\text{NHC}(\text{O})\text{O}-$  or  $-\text{NHC}(\text{O})\text{R}-$ ;

wherein R is -H, an acyl group, a substituted or unsubstituted aliphatic group, a substituted or unsubstituted aromatic group, a substituted or unsubstituted heteroaromatic group, or a substituted or unsubstituted cycloalkyl group; or

$\text{R}_1$  is -H, 2-phenyl-1,3-dioxan-5-yl, a C1-C6 alkyl group, a C3-C8 cycloalkyl group, a C5-C7 cycloalkenyl group or an optionally substituted phenyl(C1-C6 alkyl) group, wherein the alkyl, cycloalkyl and cycloalkenyl groups are optionally substituted by one or more groups of formula  $-\text{OR}^a$ ; provided that  $-\text{OR}^a$  is not located on the carbon attached to nitrogen;

$\text{R}^a$  is -H or a C1-C6 alkyl group or a C3-C6 cycloalkyl;

$\text{R}_2$  is -H, a substituted or unsubstituted aliphatic group, a substituted or unsubstituted cycloalkyl, a halogen, -OH, cyano, a substituted or unsubstituted aromatic group, a substituted or unsubstituted heteroaromatic group, a substituted or unsubstituted heterocycloalkyl, a substituted or unsubstituted aralkyl, a substituted or unsubstituted heteroaralkyl,  $-\text{NR}_4\text{R}_5$ , or  $-\text{C}(\text{O})\text{NR}_4\text{R}_5$ ;

$\text{R}_3$  is a substituted or unsubstituted cycloalkyl, a substituted or unsubstituted aromatic group, a substituted or unsubstituted heteroaromatic group, or a substituted or unsubstituted heterocycloalkyl; or L is  $-\text{NRSO}_2-$ ,  $-\text{NRC}(\text{O})-$ ,  $-\text{NRC}(\text{O})\text{O}-$ ,  $-\text{S}(\text{O})_2\text{NR}-$ ,  $-\text{C}(\text{O})\text{NR}-$  or  $-\text{OC}(\text{O})\text{NR}-$ , and  $\text{R}_3$  is substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl or substituted or unsubstituted aralkyl; and

$\text{R}_4$ ,  $\text{R}_5$  and the nitrogen atom together form a 3, 4, 5, 6 or 7-membered, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted heterobicycloalkyl or a substituted or unsubstituted heteroaromatic; or

$\text{R}_4$  and  $\text{R}_5$  are each, independently, -H, azabicycloalkyl, a substituted or unsubstituted alkyl group or Y-Z;

Y is selected from the group consisting of  $-\text{C}(\text{O})-$ ,  $-(\text{CH}_2)_p-$ ,  $-\text{S}(\text{O})_2-$ ,  $-\text{C}(\text{O})\text{O}-$ ,  $-\text{SO}_2\text{NH}-$ ,  $-\text{CONH}-$ ,  $(\text{CH}_2)_p\text{O}-$ ,  $-(\text{CH}_2)_p\text{NH}-$ ,  $-(\text{CH}_2)_p\text{S}-$ ,  $-(\text{CH}_2)_p\text{S}(\text{O})-$ , and  $-(\text{CH}_2)\text{S}(\text{O})_2-$ ;

p is an integer from 0 to 6;

Z is a substituted or unsubstituted alkyl, substituted or unsubstituted amino, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl or substituted or unsubstituted heterocycloalkyl group; and



j an integer from 0 to 6.

12 – 45 (Cancelled).

46. (Previously Presented) A compound selected from the group consisting of

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2-(trifluoromethoxy)-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-chlorophenyl)-2-chloro-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-chlorophenyl)-2-fluoro-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2-chloro-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-chlorophenyl)-3-fluoro-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-chlorophenyl)-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-chlorophenyl)-3-(trifluoromethyl)-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-chlorophenyl)-4-chloro-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-chlorophenyl)-2-cyano-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2-nitro-1-benzenesulfonamide;



N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2,6-difluoro-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2,3,4-trifluoro-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-4-bromo-2-fluoro-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2,5-difluoro-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-3,4-difluoro-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2-bromo-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2,6-dichloro-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2,4,6-trichloro-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2,4-dichloro-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2-chloro-4-fluoro-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2,4-difluoro-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2-iodo-1-benzenesulfonamide;



N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2,3-dichloro-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-4-bromo-2,5-difluoro-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2-chloro-4-cyano-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2-chloro-6-methyl-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-3-chloro-2-methyl-1-benzenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-4,5-dibromo-2-thiophenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-5-bromo-2-thiophenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-3-bromo-5-chloro-2-thiophenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2,5-dichloro-3-thiophenesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2,1,3-benzothiadiazole-4-sulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2,1,3-benzoxadiazole-4-sulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-7-chloro-2,1,3-benzoxadiazole-4-sulfonamide;



N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-7-methyl-2,1,3-benzothiadiazole-4-sulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-5-methyl-2,1,3-benzothiadiazole-4-sulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-5-chloro-2,1,3-benzothiadiazole-4-sulfonamide; and

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-(2-nitrophenyl)methanesulfonamide;

N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2,5-dibromo-3,5-difluoro-1-benzenesulfonamide;

and pharmaceutically acceptable salts thereof.

47. (Previously Presented) The compound of Claim 1, wherein L is  $\text{-NHSO}_2\text{-}$  or  $\text{-NHC(O)-}$ .

48. (Previously Presented) The compound of Claim 1, wherein L is  $\text{-NHSO}_2\text{CH}_2\text{-}$ ,  $\text{-NHC(O)CH}_2\text{-}$ , or  $\text{-NHSO}_2\text{CH=CH-}$ .

49. (Previously Presented) A compound according to claim 1 wherein A is a five or six membered heteroaromatic ring.

50. (Previously Presented) A compound according to claim 1 wherein L is  $\text{-N(C(O)OR)-}$ ;  $\text{-N(C(O)R)-}$ ;  $\text{-N(SO}_2\text{R)-}$ ;  $\text{-CH}_2\text{O-}$ ;  $\text{-CH}_2\text{S-}$ ;  $\text{-CH}_2\text{N(R)-}$ ;  $\text{-CH(NR)-}$ ;  $\text{-CH}_2\text{N(C(O)R)-}$ ;  $\text{-CH}_2\text{N(C(O)OR)-}$ ;  $\text{-CH}_2\text{N(SO}_2\text{R)-}$ ;  $\text{-CH(NHR)-}$ ;  $\text{-CH(NHC(O)R)-}$ ;  $\text{-CH(NHSO}_2\text{R)-}$ ;  $\text{-CH(NHC(O)OR)-}$ ;  $\text{-CH(OC(O)R)-}$ ;  $\text{-CH(OC(O)NHR)-}$ ;  $\text{-CH=CH-}$ ;  $\text{-C(=NOR)-}$ ;  $\text{-C(O)-}$ ;  $\text{-CH(OR)-}$ ;  $\text{-NHC(O)R}_{130}\text{-}$ ;  $\text{-N(R)S(O)-}$ ;  $\text{-NHSO}_2\text{R}_{130}\text{-}$ ;  $\text{-OC(O)N(R)-}$ ;  $\text{-S(O)N(R)-}$ ;  $\text{-N(C(O)R)S(O)-}$ ;  $\text{-N(C(O)R)S(O)}_2\text{-}$ ;  $\text{-N(R)S(O)N(R)-}$ ;  $\text{-N(R)S(O)}_2\text{N(R)-}$ ;  $\text{-C(O)N(R)C(O)-}$ ;  $\text{-S(O)N(R)C(O)-}$ ;  $\text{-S(O)}_2\text{N(R)C(O)-}$ ;  $\text{-OS(O)N(R)-}$ ;  $\text{-OS(O)}_2\text{N(R)-}$ ;  $\text{-N(R)S(O)O-}$ ;  $\text{-N(R)S(O)}_2\text{O-}$ ;  $\text{-N(R)S(O)C(O)-}$ ;  $\text{-N(R)S(O)}_2\text{C(O)-}$ ;  $\text{-SON(C(O)R)-}$ ;  $\text{-SO}_2\text{N(C(O)R)-}$ ;  $\text{-N(R)SON(R)-}$ ;  $\text{-N(R)SO}_2\text{N(R)-}$ ;  $\text{-N(R)P(OR')O-}$ ;  $\text{-N(R)P(OR')-}$ ;  $\text{-N(R)P(O)(OR')O-}$ ;  $\text{-N(R)P(O)(OR')-}$ ;  $\text{-N(C(O)R)P(OR')O-}$ ;  $\text{-N(C(O)R)P(OR')-}$ ;  $\text{-N(C(O)R)P(O)(OR')O-}$  or  $\text{-N(C(O)R)P(OR')-}$ , wherein R and R' are each, independently, -H, an acyl group, a substituted or unsubstituted



aliphatic group, a substituted or unsubstituted aromatic group, a substituted or unsubstituted heteroaromatic group, or a substituted or unsubstituted cycloalkyl group and  $R_{130}$  is an aliphatic group.

51. (Previously Presented) A compound according to claim 1 wherein  $R_3$  is a substituted or unsubstituted cycloalkyl, or a substituted or unsubstituted heterocycloalkyl; or L is  $NRSO_2$ -,  $NRC(O)$ -,  $NRC(O)O$ -,  $-S(O)_2NR$ -,  $-C(O)NR$ - or  $-OC(O)NR$ -, and  $R_3$  is substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl or substituted or unsubstituted aralkyl.

52. (Previously Presented) The compound N-(4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl)-2-(trifluoromethoxy)-1-benzenesulfonamide.